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(12) United States Patent

Winter et al.

(10) Patent No.:

US 6,248,516 B1

(45) Date of Patent:

Jun. 19, 2001

(54) SINGLE DOMAIN LIGANDS, RECEPTORS COMPRISING SAID LIGANDS METHODS FOR THEIR PRODUCTION, AND USE OF SAID LIGANDS AND RECEPTORS

(75) Inventors: Gregory Paul Winter; Elizabeth Sally Ward, both of Cambridge; Detlef

Güssow, Abington, all of (GB)

(73) Assignee: Medical Research Council, London

Subject to any disclaimer, the term of this (*) Notice: patent is extended or adjusted under 35

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(21) Appl. No.: 08/470,031

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(30)Foreign Application Priority Data

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(51) Int. Cl. ⁷		Q 1/68
(52) U.S. Cl.	435/6; 435/69.6; 435/	252.33;
•	435/441;	

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Primary Examiner-James Ketter (74) Attorney, Agent, or Firm-Nixon & Vanderhye PC

(57)**ABSTRACT**

The present invention relates to single domain ligands derived from molecules in the immunoglobulin (lg) superfamily, receptors comprising at least one such ligand, methods for cloning, amplifying and expressing DNA sequences encoding such ligands, preferably using the polymerase chain reaction, methods for the use of said DNA sequences in the production of lg-type molecules and said ligands or receptors, and the use of said ligands or receptors in therapy, diagnosis and catalysis.

21 Claims, 23 Drawing Sheets